

The mission of the Catalan Institute of Nanoscience and Nanotechnology (ICN2) is to achieve the highest level of scientific and technological excellence in Nanoscience and Nanotechnology. Its research lines focus on the newly-discovered physical and chemical properties that arise from the behavior of matter at the nanoscale. ICN2 has been awarded with the Severo Ochoa Center of Excellence distinction for two consecutive periods (2014-2018 and 2018-2022). ICN2 comprises 19 Research Groups, 7 Technical Development and Support Units and Facilities, and 2 Research Platforms, covering different areas of nanoscience and nanotechnology.

Job Title: Postdoctoral Researcher

Research area or group: Nanobioelectronics and Biosensors Group

Description of Group/Project:

The Nanobioelectronics and Biosensors Nanobioelectronics and Biosensors Group at ICN2 is focused on the discovery and technological development of cutting-edge nanotechnology towards diagnostics, food and safety and environmental applications. The group exploits phenomena that occur at the nanoscale in order to generate simple and novel biosensing platforms. They hold a wide expertise in cells, pathogens, DNA, proteins and small molecules detection using both optical and electrochemical approaches.

The main objective of Merkoçi group is to design nanotech devices that can be used even by non-professional people for fast diagnostic at home or doctor's office, control of food quality, safety and security applications where either an emergency exists or an alternative method toward the sophisticated and expensive laboratory instrumentation is being required.

Main Tasks and responsibilities:

The work focuses on development of cost/efficient electro/optical biosensing devices. Main objectives of the position are:

- a) Design and application of nanobiosensor for diagnostic applications
- b) Application of the nanobiosensors in clinical setting etc.
- c) Preparation of scientific reports, papers and projects documentation
- d) Contribution to other activities in the group,
- e) Project proposals preparation,
- f) Master and PhD students supervision

Requeriments:

- **Education**

PhD on Materials Science, Chemistry, Biotechnology, or related disciplines

- **Knowledge and professional experience**

We are looking for a candidate with experience in the design, preparation and application in clinical area of lateral flow devices based on optical detection using nanoparticles (or other nanomaterials) as labels. Shown experience with publications, patent/s related to this topic is requested.

High level proficiency in English

- **Competences**

Ability to work with deadlines, Ability to be creative, proactive in research ideas and activities, excellent communication skills and ability to work within a research group including collaboration with other international teams.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: Temporary (1 year, renewable up to 2 years)
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.
- Life Insurance.

Estimated Incorporation date: May 2021

How to apply:

All applications must be made via the ICN2 website and include the following:

1. A cover letter.
2. A full CV including contact details.
3. 2 Reference letters or referee contacts.

Deadline: 18th May 2021

Equal opportunities:

ICN2 is an equal opportunity employer committed to diversity and inclusion of people with disabilities.